
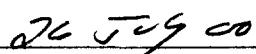
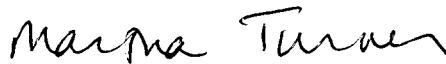

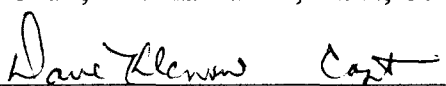



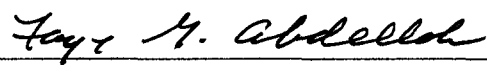
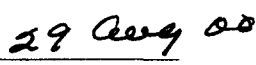
**THE PERIOPERATIVE EXPERIENCE OF THE AMBULATORY SURGERY  
PATIENT**

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## ABSTRACT

The lived experience of **ambulatory surgery patients** during the perioperative period was explored using a phenomenological approach. The purpose of the study was to examine the **perioperative experience** from the patient perspective. Purposive sampling of 5 ambulatory surgery patients was used. Data was generated using open-ended core questions and in-depth interactive interviews. Data was analyzed using the qualitative methods of P. Colaizzi (1978). Interview data was studied until interpretive clusters and themes emerged. Themes were integrated into a comprehensive description of the phenomenon. The significance of the study is based on its contribution to nursing knowledge by advancing the understanding of ambulatory patients' perioperative experiences, furthermore, little research currently exists in this area.

Key words: **ambulatory surgery patient** **perioperative experience** **qualitative research**

THE PERIOPERATIVE EXPERIENCE OF THE AMBULATORY SURGERY  
PATIENT

by

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## **PREFACE**

This research was conducted to provide a description of the perioperative experiences of the ambulatory surgery patient. The data obtained will be provided to the military medical treatment facility where the study was conducted.

## DEDICATION

To Rod and Connor I dedicate this thesis  
without your love and support, none of my goal or hopes would be realized or  
meaningful. I love you

To my parents Joy and Doug  
for your continued love, belief, and support during this thesis and throughout my life

To my sisters  
for helping me to appreciate this time in my life as a period of wonderful growth, learning,  
and gentle understanding

To Rod's family  
for unconditional support

To Julie  
for peace of mind

To members of my thesis committee  
for your efforts in guiding this study to its completion  
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To study participants for your generous descriptions

To God be the Glory

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## CHAPTER I: INTRODUCTION

Most patients scheduled to undergo surgery often experience some anxiety.

Anxiety is defined as an emotional response to a threatening situation and it is generally agreed that surgery and the associated hospitalization produce a variety of threats. Fear of pain, not awakening, possible disability, coping with new social situations, deprivation of normal freedoms, or even loss of life are among possible sources of anxiety (Johnson, 1980).

Surgery is widely regarded as a stressor or a stressful life event that requires coping and adaptation for a successful outcome. It is one of those life experiences that may have both positive and negative aspects. On the positive side there is the hope of relief from disturbing symptoms, increased ability to function, or the promise of survival. On the negative side there is the physical risk of surgery, the fear of death, the loss of control, the disruption in normal routine, possible unfulfilled expectations regarding the outcome, and the fatigue afterwards (O'Hara, Ghoneim, Hinrichs, Mahesh & Wright, 1989).

It is generally expected that patient apprehension should be minimized in the preoperative period, as fear and anxiety have been linked to refusal of certain types of anesthesia, intra-operative and postoperative pain, and other psychophysical reactions (Shafer, 1996). Effective preoperative preparation has been associated with positive patient outcomes. Preoperative preparation should include techniques to minimize patient anxiety utilizing both pharmacological and non-pharmacological approaches (White, 1997).

Pharmacological and non-pharmacological practices are widely used in the ambulatory surgery environment to prepare patients for surgery. These are important aspects of the patient's surgical experience. Changes in healthcare delivery are also likely to influence the patient's perioperative experience.

### Background

The significance of this study is based on its contribution to nursing knowledge by advancing the understanding of ambulatory patients' perioperative experiences. A search of MEDLINE and CINAHL between 1972 and 1999 revealed there are few studies which examine the perioperative experience from the "patient's point of view." Numerous studies about the incidence of perioperative anxiety, its causes, treatments, and predictors were found. Patient satisfaction surveys, which examine patient perceptions of care, are numerous. However, patient surveys represent an evaluation of the healthcare experience based on the researcher's values, perceptions, and interactions with the healthcare environment (Fung & Cohen, 1998).

Surveys may not address the way patients view their care or reflect what patients value most. For example, single-item or multi-item patient surveys may not accurately reflect the patient perspective, as there may be discrepancies between the quality of care received by patients and the level of satisfaction they report. In fact one woman claimed she was satisfied with her general anesthetic despite being awake for her operation (Fung & Cohen, 1998). According to Fung and Cohen, there are a number of patient and methodological factors that may account for discrepancies between the patient experience and what they report in surveys.

In settings of real or perceived risk such as a surgery, responses on patient surveys may be overly influenced by a sense of relief that the procedure was completed safely. As a result, patients who report they are satisfied may be merely expressing their gratitude to the providers who "got them through it" (Fung & Cohen, 1998).

Patients may also be unwilling to criticize doctors and nurses, which may be due in part to patients' trust in the healthcare system, a belief that "every one is doing their best," or fear of jeopardizing future care. These artifacts in the healthcare environment potentially threaten the validity of survey results (Fung & Cohen, 1998).

Finally, patients may be more likely to recall, or place disproportionate weight on, positive versus negative impressions. If so, even major deficiencies in care may be undetected (Fung & Cohen, 1998). A tendency to report only positive events may be one reason why in a study published by King (1989), few patients (10%) spontaneously recalled anesthetic complications when questioned generally: did you have a problem with your anesthetic? However, most (>80%) of the same patients identified at least one complication they experienced from a list of complications. Further, the wording of the questionnaire may fail to describe what each area of care represents (Fung & Cohen, 1998). If exact wording of items is not provided, patients will be unclear as to exactly what specific aspects of care they are rating.

Surveys published by anesthesiologists, which yielded large lists of patient perceptions of anesthesia care, were reviewed by Fung and Cohen (1998). Because few researchers have sought direct input of patients in the selection of items and inclusion in

the surveys, anesthesia surveys reflect, to a certain extent, the biases of those who developed them (Fung & Cohen, 1998).

Patients' anxiety may, or may not, reflect the assumptions of healthcare providers (Domer, Everett, & Keller, 1989). For example, anesthesia providers might assume patients' primary fears include inadequate pain control or the fear of death, when in actuality patients' primary concerns may be privacy issues or loss of control.

Healthcare professionals have an opportunity to help allay natural fears most patients' experience, and this can be done best by first understanding the patients' perspective. Additionally, quality of care decisions, patient satisfaction, and clinical outcomes can be improved by understanding the patient view. Patients' personal descriptions of their perioperative experience will achieve an understanding, which will contribute to an overall understanding of the perioperative experience.

This study will also begin to meet some of the challenges posed by the Triservice Nursing Research Program Advisory Council who have identified health care delivery systems and ambulatory surgery as high priority research areas.

#### Aim of the Study

The specific aims of this study were to (a) obtain a description of ambulatory patients' perioperative experiences, (b) extract significant statements and phrases pertaining directly to the phenomenon, (c) formulate meanings from significant statements and phrases, (d) cluster meanings into themes, and (e) integrate results into an exhaustive description of the phenomenon (Colaizzi, 1978).

### Research Question

A phenomenological approach was used to address the research question: What is the perioperative experience of ambulatory surgery patients?

### Methodology

What is the meaning of one's lived experience? Understanding our patients' perspective requires that the individual interpret their actions or experience for researchers, and then the researchers must interpret the explanations provided by the patients (Burns & Grove, 1997). In this study, a phenomenological approach was used. Phenomenology is both a philosophy and a research method. The purpose of phenomenological research is to describe experiences as they are lived----in phenomenological terms, to capture the "lived experience" of study participants.

"Phenomenology, rooted in philosophical tradition developed by Husserl, is an approach to thinking about what the life experiences of people are like" (Polit and Hungler 1992, p. 327). In this study, the question was be asked: What is the essence of this phenomenon as experienced by these patients? The phenomenologist assumes there is essence that can be understood, in much the same way that the ethnographer assumes a culture exists. Polit and Hungler state the following: "The focus of phenomenologic inquiry, then, is what people experience in regard to some phenomenon and how they interpret those experience" (p. 328).

### Definition of Terms

1. Ambulatory or Outpatient Surgery. Scheduled surgical procedures provided to patients who do not remain in the hospital overnight (Burns, 1984).

2. American Society of Anesthesiologists (ASA) Classification System. The ASA classification system classifies the physical condition of a patient requiring anesthesia. The purpose of this classification system is to provide a consistent means of communication to anesthesia staff about the physical status of a patient (Nagelhout and Zaglaniczny, 1997). Patients who meet ASA class I or II criteria are generally considered candidates for ambulatory surgery (Wolcott, 1988).
3. American Society of Anesthesiologists' Class I. A patient classified as an ASA status I is a healthy individual except for his or her surgical problem (Nagelhout and Zaglaniczny, 1997).
4. American Society of Anesthesiologists' Class II. A patient classified as an ASA status II is an individual with mild-to-moderate physical disturbances (e.g. mild diabetes, high blood pressure, or moderate obesity) that are well controlled (Nagelhout and Zaglaniczny, 1997).
5. Perioperative. Refers to the period "around the surgery". For purposes of this investigation, the perioperative period began when the patient first reports for the pre-anesthesia visit and ends when the patient leaves the ambulatory surgery unit following their surgical procedure.

#### Assumptions

The following assumptions are adapted from Munhall (1994), van Manen (1990), and Benner (1994).

1. The investigator must turn to a phenomenon that seriously interests her and commits her to the world.



2. The experience must be investigated as it is lived.
3. Interpretation presupposes a shared understanding.
4. The phenomenon is situated in context and the context includes space, body, relationships, and time.
5. The context changes with differences in space, body, relationship and time.
6. Perception, cognition, and language provide access to meaning.
7. Reflection on lived experience helps distinguish appearance from essence.

#### Limitations

The following aspects of the study could be considered limitations:

1. The investigation is limited to the descriptions of the patients who participated in the study.
2. The investigation is limited to the information provided by the participants.
3. The investigation is limited by the patients' descriptions of their perioperative experience.

## CHAPTER II: EVOLUTION OF THE STUDY

### Introduction

In this chapter, a review of the pharmacological and non-pharmacological practices used in the ambulatory surgery environment to prepare patients for surgery will be described. These are important aspects of patients' surgical experience. Second, pertinent studies upon which these practices are based will be reviewed. Finally, healthcare delivery changes occurring in the United States will also be described because these are likely to impact the patient's perioperative experience.

### Perioperative Anxiety

"Don't tell me anything about what will happen. I would rather not know." "You must be joking. I have to arrive at 6.00 AM for surgery? I have a 3-hour drive." "Why was I not told I would be so tired after anesthesia" (Lancaster, 1997, p. 417)?

"You mean I'll be going home the day of my surgery?" "I just answered those questions in my doctors office and at the check in desk. Must I answer them again?"

Each patient who undergoes ambulatory surgery has a unique perspective. Some may be concerned about the financial ramifications of surgery, more than the procedure itself. "How many days of work will be missed?" "Some are fearful and anxious about the procedure of anesthesia" (Lancaster 1997, p. 417). Others may have privacy issues. For example, one patient expressed concern that he might be "exposed in the operating room in the presence of medical personnel."

Many working parents who have surgery are concerned about child care and transportation arrangements while they are at the hospital and later when they are out of

work. Elderly patients may fret over dependent spouses while they should be thinking of their own convalescence (Lancaster, 1997). Most patients scheduled for elective operation will experience some degree of anxiety (White, 1997). This normal expected response is often viewed as a problem, thus health care personnel make efforts to reduce anxiety. Anxiety is an unpleasant emotion and the less experienced the better. Some suggest that patients with high anxiety have a greater surgical risk than those with low anxiety (Johnson, 1980). "Psychological stress can provoke heart arrhythmias, exacerbate diabetes, alter blood-clotting mechanisms and increase the risk of gastric ulceration" (Domar, Noe, & Benson, 1987, p. 101)".

Further, Williams, Williams, and Jones (1975) argue that patients with high anxiety levels have higher surgical risk because they require higher doses of anesthesia.

Finally, studies have demonstrated a relationship between pre-operative anxiety and the length of hospitalization, pain medication, and psychological adjustment (Johnson, 1980). The importance of minimizing anxiety is demonstrated in the studies cited above.

Johnson (1980) examined the natural course of anxiety before and after surgery using the State Trait Anxiety Inventory in 4 studies involving 136 surgical patients. The findings suggested that "high levels of anxiety were experienced before admission to the hospital, between admission and surgery and following surgery, and were not restricted to the immediate pre-operative period. Only a small percentage of patients reached their maximum level of anxiety on the morning of surgery" (p. 145). These

results have practical implications for healthcare personnel planning interventions to relieve the anxiety associated with surgery.

### Preoperative Pharmacological Preparation of Patients

The administration of preoperative medication is dominated by tradition. Much of the reason for preoperative medication arose in the days when the most widely used anesthetics were ether and cyclopropane (White, 1997). Today, the most common reason for administering medications prior to surgery is to make the experience of anesthesia more pleasant and less traumatic for patients.

From the patients' point of view, the lack of recall and relief of anxiety may be the primary objective of medications given prior to surgery. It is important to consider that many patients may not wish to have prolonged amnesia. Some may prefer to have recall of events before and after surgery. Finally, it has been demonstrated that excessive sedation may actually increase anxiety (White, 1997).

A variety of medications are used to minimize preoperative anxiety. Presently, the most commonly used drugs in the ambulatory setting are the sedative-anxiolytic compounds, specifically, the benzodiazepines. Many studies have demonstrated the superior anxiolytic, sedative, and amnesic properties of benzodiazepams (White, 1997). Benzodiazepams, such as midazolam, are popular in the ambulatory care setting because they provide fast onset relaxation without a delay in recovery time (Shafer, 1989).

### Non-pharmacological Preoperative Preparation of Patients

Preoperative preparation should include non-pharmacological techniques for minimizing patient anxiety (White, 1997). A number of researchers have evaluated the

relative efficacy of different approaches to reducing anxiety associated with surgery. The most common psychological intervention has been the factual presentation of information concerning the upcoming surgical procedure (Domar et al.,1987).

More than 30 years ago, Egbert, Battit, Turndorf, and Beecher (1963) reported the effectiveness of a preoperative visit with a personal interview in decreasing anxiety. In this classic study, the psychologic condition of 449 patients was evaluated; they compared the value of a preoperative visit with the pre-anesthetic medication pentobarbital. Patients who had been visited by an anesthetist before surgery were significantly more likely to be calm on the day of the operation. Egbert et al. demonstrated that a visit by an anesthetist was superior to barbiturates in reducing anxiety as assessed by both observer and patient. He suggested that patients who had received information during a reassuring personal visit; coped better with preoperative stresses, experienced less pain, and required less pain medication, which implies a speedier recovery. Until his publication, few had described the possibility that health care personnel might have an important effect on patient preparation for surgery. Other studies that documented the psychological benefits of the preoperative visit followed.

Leigh, Walker, and Janaganathan (1977) reported that patients who received preoperative reassurance about anesthesia from a member of the hospital staff were less anxious than those in a control group that were given no such support. Additionally, they expressed concern that anesthesia providers could no longer afford the time to visit patients preoperatively. Leigh et al. wanted this trend to be reversed.

Madej and Paasuke (1987) described several ways in which preoperative visits reduce anxiety. First, information may help to relieve uncertainties or misconceptions. Second the visit gives patients opportunities to discuss any fears and to be reassured. They also emphasized that the effectiveness of the preoperative interview will depend on the content, format, timing, personality of the interviewer, and personality and circumstances of the patient.

More currently, relaxation training, informative preparatory booklets, and audiovisual instructions are other interventions used to reduce anxiety and prepare patients and families for the surgical experience (White, 1997).

The results of several studies provide evidence that patients may benefit from relaxation techniques. Flaherty and Fitzpatrick (1978) utilized a relaxation technique to prepare 42 patients for elective surgery. Blood pressure, pulse, and respiratory rates were compared prior to surgery and after the first postoperative attempt to get out of bed. A pain and distress scale measured subjects' reports of incisional pain and body distress after their first postoperative attempt at getting out of bed. Mean differences in report of incisional pain, body distress, pain medication consumption, and respiratory rate, were statistically significant, supporting the hypothesis that use of relaxation technique to reduce muscle tension will lead to an increased comfort level of postoperative patients.

### Contemporary Health Care Delivery

Over the past two decades, remarkable changes have occurred in the health care system. Two of the most dramatic changes have been the shift in patient care to the

ambulatory setting, and the increasing emphasis on providing cost-effective or value based care. These changes are a result of increasing pressures to reduce expenditures in health care (White, 1997).

In the past there was time for patients to establish relationships with their surgeons, and were seen by anesthesia providers the day before surgery. Traditionally, patients were admitted to the hospital the evening before surgery where they received individualized attention and information from nursing personnel. At bedtime, an oral hypnotic was often given to ensure a good nights sleep. In the morning, oral sedatives were administered to reduce anxiety and make the surgical experience less traumatic.

Today, patients experience shorter hospital stays and quicker recoveries at home. Typically, ambulatory surgery patients are asked to arrive at the ambulatory surgery unit two hours before their scheduled surgery and are generally released the same day. According to Lancaster (1997), anesthesia providers may not even see their patients until the day of surgery.

Lancaster (1997) explains that at Dartmouth-Hitchcock Medical Center, a rural tertiary teaching institution in northern New England, fewer than 20% of patients are seen by an anesthesia provider the day before surgery. At this institution the preparation process begins in the surgeon's office where the physicians, residents, advanced practice nurses, and nursing staff conduct specific teaching. From the surgeon's office, patients are sent to preadmission testing areas, where computerized preanesthesia screens are completed. Answers provided by patients to the standardized questions, as well as the proposed procedure, and the patient's vital signs are used to determine the American

Society of Anesthesiologists (ASA) category. This alone determines whether a patient must see an anesthesia provider before the day of surgery.

Ambulatory surgery patients who present the day of surgery for an elective surgery operation and are then discharged home, present a myriad of unique challenges for physicians, nurses, and administrators. In order for ambulatory surgery to be safe and efficient, careful selection of patients and procedures is crucial. Ideally, procedures should (a) be performed in a reasonable amount of time or < 90 min, (b) not be associated with excessive loss or fluid shifts, and (c) not require specialized equipment or postoperative care. Additionally, post-surgical pain should be manageable by the patient at home (White, 1997). Further, the ambulatory surgery environments challenge anesthesia providers' preoperative goal of a low-anxiety patient by requiring individuals to be "street ready" within a brief period of time after surgery (Alpert & Thomas, 1985).

The trend toward ambulatory surgery decreases the time healthcare personnel spend with preoperative patients and challenges perioperative staff to provide effective comprehensive support in limited time. According to Lancaster (1997), ambulatory surgery nurses often wonder what perioperative information is critical to teach and how much is enough. When the volume is high and pace relentless, time with the patients and family is limited. Lancaster questioned best methods for properly preparing patients for surgery. Should preparation be in person, or can telephone or interactive computer conduct assessment and evaluation of patient needs?

Finally, prior to releasing an ambulatory patient from the protective environment of an ambulatory surgery facility, evidence must exist that the individual will be able to



cope comfortably and safely with minimal assistance (Chung, 1993). Patients must meet established recovery criteria to ensure their safe release from the ambulatory surgery unit. For example, surgery patients are usually not released to home until they are free from nausea and able maintain oral fluids. This ensures adequate hydration. The challenge in the ambulatory care environment is to provide research based quality care in this rapidly changing environment (White, 1997).

#### Benefits of Ambulatory Surgery

Ambulatory surgery can offer a number of advantages for patients, healthcare providers, third-party payers, and even hospitals. Advantages of ambulatory surgery were identified by White (1997). They included (a) a reduction in time patients spend separated from the familiar home and family environment, (b) a decrease in the likelihood of contracting hospital acquired diseases, (c) fewer preoperative lab tests, (d) a reduced need for postoperative pain medication, (e) greater flexibility in selecting surgery time, and (f) a reduction in healthcare dollars spent.

#### Controversies in Ambulatory Practices

Scientific basis for many common practices in ambulatory anesthesia and surgery has been lacking. Although research activities related to ambulatory surgical practices continue to increase, many controversies remain unresolved. As new drugs and techniques are introduced into clinical practices, decisions regarding optimal approaches to providing ambulatory anesthetic care will become increasingly complex. Unresolved ambulatory surgery questions were identified by White (1997). Questions included (a) Should preoperative medications be used on a routine basis? (b) Should patients be

instructed to avoid drinking fluids before an elective ambulatory procedure? (c) Which anesthetic techniques should be used? (d) Which pain medication combinations are preferred for ambulatory pain management? (e) What is the cost:benefit ratio of the new pain medications and anesthetics? (f) What factors are most important in determining patient's suitability for ambulatory anesthesia? (g) Which criteria should be used to determine when the ambulatory patient is home ready? (h) What preoperative lab tests should be required? and (i) is oral fluid intake necessary before release from the ambulatory surgery environment?

### Summary

The trend toward ambulatory surgery has changed the way surgical care is delivered. The benefits and controversies of ambulatory surgery have been described. A review of the literature has demonstrated that research related to ambulatory surgery is needed. Further, few studies were found that examines perioperative experience from the patient's point of view. How is the current environment experienced by the patient? What is the anxiety level of the patient who is at home the night before surgery without the availability of medical resources? This study will begin to breach a gap in knowledge. The aim of this investigation will be to explore the perioperative experience from the patient perspective.

## CHAPTER III: METHODOLOGY

### Method of Inquiry: General

A phenomenological approach was used to address the research question: What is the perioperative experience of the ambulatory surgery patient? In this chapter an introduction of phenomenology as a philosophy and research method is presented. Reasons for method selection and philosophical underpinnings are addressed. Procedures for sample selection, data collection, and storage are described. Protection of participants and trustworthiness considerations are also discussed.

### Qualitative Method

Qualitative research has been described as "modes of systematic inquiry concerned with understanding human beings and the nature of their transactions with themselves and with their surroundings" (Benoliel, 1984, p. 3). Qualitative research is often described as holistic (i.e., concerned with humans and their environment in all their complexities) and naturalistic (i.e., without any researcher-imposed constraints or controls). Qualitative research is based on the premise that knowledge about humans is not possible without describing human experiences as it is lived and it is defined by the participants themselves (Polit & Hungler, 1992).

Qualitative researchers gather and analyze loosely structured narrative materials that give free rein to the rich potential of the perceptions and subjectivity of humans. Qualitative inquiries, because of their emphasis on the participants' realities, require a minimum of structure and a maximum of researcher involvement as the researcher tries to comprehend those people whose experience is under study. Imposing structure on the

research situation (e.g., by deciding in advance exactly what questions to ask and how to ask them) necessarily restricts the portion of the participants' experience that will be revealed (Polit & Hungler, 1992).

A debate has emerged in recent years about whether qualitative or quantitative studies are better suited for advancing nursing science, but there is growing recognition that both approaches are needed. The degree of structure a researcher imposes should be based on the nature of the research question. For example, if a researcher asks what is the perioperative experience of the surgery patient, the investigator is really seeking to understand an experience that is complex, interpersonal, and dynamic. On the otherhand, if a researcher asks, what is the effect of alternative topical gels on the patient's level of pain? it seems appropriate to seek specific quantitative data in a structured format. Both of these hypothetical questions have a place in nursing research because both can contribute to the improvement of nursing practice (Polit & Hungler, 1992).

Both qualitative and quantitative researchers are concerned about the patient's point of view. However, qualitative investigators think they can get closer to the participant's perspective through detailed interviewing and observation. Denzin and Lincoln (1994) argued that quantitative researchers seldom are able to capture the subject's perspective because they have to rely on more remote, inferential empirical materials. Experimental and survey-type methods can never yield the rich and potentially insightful material that is generated using an unstructured approach. Among the important purposes of qualitative research include the following:

1. Description. When little is known about a group of people, an institution, or some social phenomenon, in-depth interviews, are an excellent ways to learn about them (Polit & Hungler, 1992). For example, little is known about the experiences of patients who undergo ambulatory surgery. From the patient perspective, what factors facilitated or impeded their perioperative experience? How did they cope with their transition back home? For this type of study, a survey approach might be inadequate.

2. Hypothesis generation. The collection of in-depth information about a phenomenon might lead to the formulation of hypotheses that can be tested more formally in subsequent research (Polit & Hungler, 1992).

3. Theory development. Many qualitative researchers have as their main objective the discovery of an integrated theory of the phenomenon under investigation. Theories in qualitative research are often described as being grounded in the empirical data rather than being based on the researcher's preconceived views about a social situation (Polit & Hungler, 1992).

At present, the most prevalent qualitative research approaches used by nurses and human science researchers are phenomenology, grounded theory, ethnography, history, case studies, and analytical philosophy (Munhall, 1994).

### Phenomenology

The aim of the phenomenological approach is to describe the experience as it is lived. Phenomenology is "a philosophy, an approach, or perspective to living, learning, and doing research" (Munhall, 1994 p. 3). The phenomenological researcher asks the question: What is the essence of this phenomenon? As cited by Powers and Knapp

(1993), phenomenology, rooted in a philosophy developed by Husserl, is a way of thinking about what life experiences are like for people. Husserl introduced the concept of the life world (Lebenswelt), or lived experience, as the natural world in which we live. He emphasized a return to reflective intuition to clarify and describe experience as it is lived and constituted in consciousness. This relates to the question, how do we know? For Husserl, it is inquiry into and commitment to clarifying and describing the essential structure of the lived world of conscious experience by meditating on the origins of experience.

Phenomenological inquiry was utilized. A phenomenological approach uses four basic steps: bracketing, intuiting, analyzing, and describing.

Bracketing is the process of identifying and holding in suspension preconceived beliefs and opinions one that might have about the phenomenon under investigation. As a nurse anesthesia student whom had completed part of a residency at the study site, I had developed a high regard for the level of care and anesthesia provided to patients at the study facility. Having been a nurse manager of an ambulatory surgery unit and recovery room in the past, I had definite ideas about how patient flow and surgical processing should be managed. Having been a surgical patient myself, the things I experienced could have colored descriptions given by each participant. To effectively draw descriptions from others, I had to first recognize the existence of my own biases and opinions. I had to free my mind so that I could fully capture the essence of each participant's experience. All of us perceive experiences in different ways; no one has the exact same upbringing or the same life experiences. To effectively bracket I focused on the question at hand, if I

felt my own biases begin to surface, I redirected my attention to the valuable descriptions being shared. I validated participant descriptions by repeating back to them what I had understood.

Finally, once you invite the person you are interviewing to share their experiences, it is important to *believe* what you hear. When you really listen to another person's point of view, it's like opening a library of new books. There are many new concepts to explore, and many new ideas to absorb. Most of us limit ourselves; we use only our own perceptions, feelings and thoughts. Consequently, we benefit from only a portion of the input that is available, as compared to what we could gain if we listened to what others can offer us.

Intuiting occurs when the researcher remains open to the meanings attributed to the phenomenon by those who have experienced it. As I conducted each interview, I focused my full attention on the speaker without interrupting, and responded to what had been said directly once that person has finished sharing their ideas. Open-ended questions were utilized. Questions like "How did that make you feel?" permitted each participant to scan the range of their emotions and respond with the most accurate information they possessed. Open-ended questioning enabled descriptions which came from the participant and not from researcher projections or limited alternatives. Researchers then proceed to the analysis phase, which includes coding, categorizing, and making sense of the meaning of the phenomenon. Finally, the descriptive phase occurs when the researcher comes to understand and define the phenomenon (Polit & Hungler, 1992).

### Specific Qualitative Method

A qualitative method based on Colaizzi's (1978) phenomenological approach was used.

1. All subjects' oral or written descriptions were read in order to obtain a feel for the whole.
2. Significant statements and phrases pertaining directly to the phenomenon were extracted.
3. Meanings were formulated from these significant statements and phrases.
4. Meanings were clustered into themes.
5. Results were integrated into an exhaustive description of the phenomenon.

### Rationale for Phenomenological Approach

The meaning of the perioperative experience of the ambulatory patient lacks both investigation and description in nursing and medical literature. What one believes to be the perioperative experience of the patient, may not in fact be the experience. Gaining an understanding of this experience is the goal of phenomenological inquiry.

Phenomenology, as a method, seeks to describe and unfold the phenomenon, so that the essence of what is meant for participants can be experienced and understood (Munhall, 1994).

A phenomenological research approach was utilized because it can best capture the meaning of human experience as it is lived by the participant. A phenomenological approach yields rich and potentially insightful material that may not be possible with experimental and survey methods (Polit & Hungler, 1992).



### Philosophical Underpinnings of Qualitative Research Methods

The philosophical underpinnings of qualitative research methods reflect beliefs, values, and assumptions about the nature of human beings, the nature of the environment, and the interaction between the two. Researchers doing qualitative research perceive reality and assign meaning to their efforts from the perspective of some of the following assumptions (Munhall, 1994):

1. Individuals are viewed within an open perspective as active agents, interpreting their own experience and creating themselves by inner existential choices.
2. The world and its people are constantly changing and evolving: This assumes a dynamic reality.
3. The subjective experience of the individual or group is valued and described. Meaning comes from the source and is not presumed, assumed, or assigned.

### Method of Inquiry: Applied

Understanding the patients' perspective requires the individual to interpret their actions or experience for researchers, and then the researchers must interpret the explanations provided by patients (Burns & Grove, 1997). To fully understand what patients are experiencing the researcher must ask, listen, and explain the lived experience of individuals from their own perspective.

Phenomenological, qualitative research methodology was used in this study for the purpose of gathering and analyzing data necessary to describe the perioperative experiences of the ambulatory surgery patient. The source of data was the participant's responses to the researcher's interview questions and written entries from a journal

maintained by the participant. An interview guide was used to guide the interview, although the full course of a semi-structured interview can not be predicted.

### Subject Selection and Setting

The population was ASA class I and ASA class II ambulatory surgery patients. The sample was selected from patients who were scheduled for a surgical procedure at an Air Force medical treatment facility on the east coast.

### Criteria for Selection

The sample for this study was obtained through purposive sampling. This involved conscious selection, by the researcher, of participants who possessed knowledge of the subject of study due to their life experiences. Participants met the following criteria:

1. Participants were willing to participate in the study and gave written consent.
2. Participants were classified as an ASA I or ASA II ambulatory surgery patient.
3. Participants were able to read and write English.
4. Participants were > 18 years old
5. Participants were scheduled for elective procedures.
6. Participants who were having surgery for life threatening or potentially life threatening diseases were excluded from this study.

### Data Collection

Patients who met inclusion criteria were approached at the preoperative anesthesia interview. An explanation of the study was provided. The value of the participation of the subject was communicated by the researcher to the participant, and

an offer made to share the findings of the study with the potential participant. When interest was expressed and criteria met, the patient was included in the study. The researcher coordinated an interview time and date with the participant. Participants were given a diary and asked to make entries during the perioperative period. After initial contact, written consent was obtained.

A tape-recorded, open-ended, interactive interview was conducted with each participant at a date and time mutually agreed upon by the participant and researcher. Interviews were conducted in a quiet, comfortable office at the medical treatment facility. The participant was told that participation is voluntary and that the interview could be stopped at any time upon their request. Patients were asked to reflect on their perioperative experience and discuss their feelings and observations, expectations, and their participation in decisions concerning the care they received. Reflective probing questions were used, to enrich the description of the experience. The interview remained flexible and expanded upon as the study progressed. Diary entries were used by some participants to help reconstruct their perioperative experiences during the interview. Study participants were assured that recordings and field notes would be stored in a secure area when not being reviewed. The transcriber signed a confidentiality agreement prior to transcribing the audiotapes.

### Data Analysis

Data was analyzed using procedures adapted from Colaizzi (1978).

1. Read the transcript to acquire a feel for it.

The subject's description of their perioperative experience was read in its entirety, in order to acquire a feeling for it. End note summaries were written.

2. Return to each transcript to extract significant statements pertaining to the phenomenon.

Significant statements pertaining to the phenomenon were highlighted.

Repetitions were eliminated since significance does not depend on the frequency of statements occurring in the text.

3. Formulate meaning using creative insight to get from what is said to what is meant.

Margin notes were written to reflect what the participant described rather than the interpretations or conclusions of the investigator. Care was taken to preserve all connection with the subject's description. This was done by continually referring back to the entire text.

4. Repeat with each transcript, then organize the formulated meanings into interpretive clusters. Acknowledge and accept the ambiguity or contradictory nature of the clusters.

Interpretive clusters were emerged from the significant statements which were organized from formulated meanings and documented in margin notes.

5. Organize the interpretive clusters into themes and validate them by referring back to the original transcript.

As interviews were completed the themes were compared with the themes from the previous participants' transcripts to ensure that the attributed

meanings were consistent. Care was taken to make sure that nothing in the transcript was missing from the themes and that nothing had been added to the themes that was not in the transcripts.

6. Integrate themes into a comprehensive description of the investigated topic.
7. Formulate a statement that identifies the fundamental structure of the experience.

Based on the interpretive clusters and the themes which emerged from the text, conclusions about the experience were formulated into a statement, which identified the fundamental structure of the experience.

#### Trustworthiness

Trustworthiness is a term used in the evaluation of qualitative work (Polit & Hungler, 1992). In this study several techniques were used to achieve trustworthiness.

Sandelowski (1986) offers a framework for evaluating qualitative research in which four factors are considered: truth-value, consistency, neutrality, and applicability. Truth-value means that the researcher accurately describes the human experience as lived and perceived by participants in the study. Consistency replaces reliability in a qualitative study. Consistency is established when adequate data from the text enables the research reader to participate in the consensual validation of the data. The investigator and research advisors agreed the data was adequate to support the themes, the structure, and the comprehensive description of the experience. Sandelowski's third criterion is neutrality. In qualitative studies the researcher maintains an objective position with regard to the study. Multiple, direct quotes of significant phrases were used to establish

neutrality in this study. Finally, applicability in qualitative research is similar to the ability to generalizability in quantitative research. Applicability can be achieved when the results of the study shed light on contexts outside the study situation.

#### Human Subject Considerations

Permission was obtained from the Uniformed Services of the Health Sciences Institutional Review Board (IRB) and the medical treatment facility IRB. The human subject consideration included informed consent, both verbal and written; confidentiality of materials by maintaining the tape and transcripts in a locked cabinet in the home of the investigator and limited anonymity in presentation of the findings through deletion of names of individuals and references to particular facilities.

## CHAPTER IV: FINDINGS OF THE STUDY

### Introduction

This chapter presents a description of the sample and the analysis of the data. Interpretive clusters and themes that constitute the fundamental structure of the experience will be presented.

### Data Collection

Patients who met inclusion criteria were approached at the preoperative anesthesia interview. ASA class I and II patients who signed into the preoperative anesthesia area were approached regarding participation. An explanation of the study was provided. The researcher communicated the value of participation and offered to share findings of the study with the participant. When interest was expressed and criteria met, informed consent was obtained. Participants were told that participation is voluntary and that the interview can be stopped at any time upon their request. Participants were given a diary and asked to make entries during the perioperative period. Four to five days after surgery the researcher contacted the study participant by phone to coordinate the interview time and date.

A tape recorded, open-ended, interactive interview was conducted with each participant at a date and time mutually agreed upon by the participant and researcher. Four interviews were conducted in the home of the participant; one interview was conducted in a quiet, comfortable office at the medical treatment facility. Patients were asked to reflect on their perioperative experience and discuss their feelings, observations, expectations, and their participation in decisions concerning the care they received. Diary

entries were used by participants to help reconstruct their perioperative experiences during the interview. Study participants were assured that recordings and field notes would be stored in a secure area when not being reviewed. None of the participants were re-interviewed.

### Description of the Sample

There were five participants in the study, four women and one man. All were family members of an active duty sponsor. Their ages ranged from 20 to 55. All were ASA class I ambulatory patients. A description of each participant is as follows:

1. A healthy 20 year old female who had a tonsillectomy under general anesthesia.
2. A healthy 32 year old male who had a septoplasty under general anesthesia.
3. A healthy 55 year old female who had a bunionectomy using local anesthesia with monitored anesthesia care.
4. A healthy 39-year-old female who had hallus repair of the left foot using local anesthesia with monitored anesthesia care.
5. A healthy 31 year old female who had excision of a left hand mass using an axillary block and monitored anesthesia care.



**Table 1.**
**Interpretive Clusters and Themes that Constitute the Fundamental Structure of the Experience**

<b>Interpretive Clusters</b>	<b>Themes</b>
Anticipation Special preparations Processing Anxieties and concerns Factors that influenced coping	Preparing
Getting there	Arriving
Waiting Staff professionalism Initial recovery Ride home	Day of surgery
	Home recovery and transition to activities of daily living
	Best part of the perioperative experience
	Worst part of the perioperative experience
	Recommendations for others about to undergo anesthesia or surgery

Essential Themes
Preparing

Anticipation. All participants described a feeling of anticipation as their day of surgery approached. Each viewed surgery as an opportunity to rid themselves of illness and discomfort. For one individual, anticipation of events to come was the most difficult part of the perioperative experience.

I was excited about having it done because I haven't been able to sleep at night and I was looking forward to the possibility of being able to sleep.

I have a difficult time sleeping, eating, and breathing. I get sinus infections every year. Plus, the sinus headaches aren't pleasant. I'm thinking a lot of these experiences will lessen.

I basically explained to him, look, I can't take this pain anymore, you know five times since May. That's ridiculous. I had come in before and seen Dr. X,

I think the third time around he said, hey look, you got to get it a couple more times then we will take them out. To me, that was just so frustrating, I thought you can't be serious. Dr. X was just like, OK, lets take them out, lets just take care of it.

I was really anticipating surgery because this is something I've never done before and it was a positive thing for me. It wasn't a negative thing at all. So to me, it was like this new adventure.

I was anxious to get my foot repaired, to be able to return to long walks without experiencing pain.

Special preparations. Participants experienced a sense of urgency as they completed personal arrangements that were necessary before their hospitalization. There were transportation and childcare issues to coordinate, refrigerators to stock, meals to prepare, and time off to negotiate from their places of employment. One individual described exerting herself to a point of exhaustion.

I work full-time. I had already put in my request for leave. I put in for the day of surgery and estimated my time that I would need to be off.

Getting the house picked up, getting the refrigerator stocked, getting everything that could be done possible just as much as I could because I knew that I wouldn't be able to do it when I was in this thing.

My mom was there so I really didn't have to do anything; except having my brother come pick me up, otherwise, nothing else.

I definitely had to make concessions with work. They were easygoing about it. It wasn't their side of it, it was mine trying to get as much as I possibly could so that somebody else didn't have to take as much of the load. Other than that, the preparation-just trying to do three weeks worth of work at home and at work. I was exhausted by the time I went in for surgery. I was completely exhausted.

Processing. Some were surprised and pleased by the ease and efficiency of hospital processing for surgery. Others found the process repetitious and anxiety

provoking. All participants cited examples of how accommodating and professional staff members were throughout the process, which minimized anxiety and made waiting more tolerable.

That day was great, we were in and out of everything, it was wonderful. I came in and saw my doctor, he said there was an appointment at 1:00 p.m. to start lab work and paperwork. I went to pre-admit; they just typed my name into the computer and stuff like that. That only took five minutes. After that we came to anesthesia, signed our name in, we got called right away so that was wonderful.

They asked me if I wanted a will of some sort, that type of thing, that was a little scary. I was just like getting my tonsils taken out.

It took a couple of hours to complete pre-admission processing. I went from one end of the hospital to another and each stop made me somewhat anxious. (Especially the part where they ask you if you have a living will and when they quote you statistics, 1 in 100, etc.). On the positive side the staff was friendly and willing to answer any questions that I had.

The people just rushed you through to get on to the next person. Everyone was nice but it seemed like a lot of it was unnecessary.

Well processing went pretty smoothly. I went from one place to the other – I can't remember in which order but I was surprised that I didn't have any long waits in any of the places. There was only one problem when I went to x-ray. It seemed that whoever puts the request in the system had not put mine in. So, they sent me back to podiatry and told them that they needed to put the request in. I don't know what happened because when I went down again, they said it still wasn't in the system.

It was fine. I mean, it was no big deal. The only problem is when you don't know the hospital. You really don't have a clue where you are going and how you are getting there. As long as you don't have any qualms asking someone, people are more than willing to help you out. The only thing that was really hard with each place that I went to, I seemed to pick up more things. So, by the end of each day, I was carrying so much stuff that when I got the crutches, I almost left them three times because I wasn't use to having them. Other than that it was very, very easy.

The Lieutenant explained the procedure for the night before surgery and the day of. Gave me soap to wash with and gave me a written list of “dos” and “don’ts - very helpful.

Even with my two-year-old it was very efficient, very easy. I did have to have an EKG, that was the only thing that was like, “Hmm, I have her with me” but they were easy going with it and she actually was very good about just sitting there while I was getting that done. Everything else went very quickly. I got in and got out of each place I needed to stop at.

Anxieties and concerns. The question, “what were your concerns or anxieties related to surgery?” generated a variety of responses. Patient concerns’ included pain management, drug side effects, intra-operative awareness, hospital procedures, recovery, loss of privacy, loss of control, fear of making a mistake, preoperative household preparations, and not being able to eat or drink for the time preceding surgery.

I guess my biggest concern was trying to get as much done in the house as possible. I wasn’t worried about the surgery at all. My concern was getting the house picked up, getting the refrigerator stocked, getting everything that could be done because I knew that I wouldn’t be able to do it when I was in this thing.

I questioned briefly if I wanted to have it done, if it was really worth it.

The only thing that really bothered me was not being able to have water before surgery.

I was worried about getting my house ready so I would not have to worry about it for a few days.

I wasn’t worried at all. Which was good, most of the time people are freaked out about surgery but I trusted Dr. X, he seemed like an excellent competent doctor so I wasn’t worried about it, plus it is a fairly usual procedure.

I had rhinoplasty a few years ago and I was really worried about that because it was the first time I had ever had surgery. When I underwent my first surgery I was 14- years- old, I had never been in a hospital before, really, and

that was stressful. So it was a little nerve racking that time especially when the anesthesiologist just like you all informed me that there is a possibility you might not come out, and I was like, ah, wonderful. My nose isn't that important to me; I'd rather live. I think because I went through that at age- 14 that I just had to deal with that, I was just like, OK. You know this wasn't a problem this time around. Also because I knew how many people have had their tonsils taken out, it is such a routine surgery. It wasn't like having brain surgery.

I was very anxious and nervous. My sister-in-law is an anesthesiologist. So I talked to them and figured out what was going on. I know it's not that big of a deal-this kind of surgery. I know it's pretty safe and everything but I hate needles.

Some of the worries I had...I don't want to get a catheter. One of the other worries that made my wife laugh was I was afraid that my mouth wouldn't open automatically after they plugged my nose.

Talking to the other nurse anesthesiologist when he kept quoting numbers like one in one hundred and one in a thousand-usually it has been my experience that I'm always that one person that they quote. So that didn't make me feel too comfortable.

I'm not looking forward to actual surgery. Getting the drugs, the IV's and the painkillers. Afterwards-not fun. For the past two weeks friends and family have shared their experiences. One person shared where he woke up in the middle of surgery. The other person how uncomfortable the packing was and so on and so forth.

No, I did not have any concerns related to anesthesia. Because I felt reassured that they would make a decision about what I needed to have because I didn't know whether I'd want to be partially awake or fully out.

I wanted to make sure that I ate at the right times-that I would not be eating anything that they told me not to eat. They had given me this antiseptic soap to scrub with when I take my shower. So, I did that. I had to use it again in the morning. I made sure I did everything they told me. I didn't eat anything that morning. They said that I could take my Maxide medication for high blood pressure. So, I took that but only with a couple sips of water. So I felt like I did pretty good preparing for surgery.

Regarding anesthesia, I knew that I didn't want anything more than I absolutely had to have. I didn't want a complete, comatose state that would take me days to recuperate from. I wanted as little as possible. My biggest concern regarding anesthesia, I guess that I would wake up and be completely nauseous and completely groggy and have not control of what I was doing or what I was feeling. That's what I don't like personally. That's why I wanted as little as possible. I know when my husband had surgery he came out and he was so nauseous and he didn't even know I was there. I wanted to wake up and that was it. I wanted to be there. I didn't even think about pain at all either. That was nothing. I knew there would be some discomfort or pain.

After I had my daughter, I had to have a D&C for a retained placenta and I was awake for that and I had horrible nightmare after that. It was very disturbing to me knowing, fully aware, 20 people in the room and me being in this position and this is what was going on. So, that's where the nightmares came in. It wasn't because of feeling something because I wasn't aware of any feeling, but it was because of that. So, for about three or four days before this surgery, and knowing I was going to be awake for it really brought back nightmares. So, I was really worried about that. The day of the surgery, I let them know that I was really afraid. And this one I was concerned. They were doing my hand this time. It's a lot different issue but I'm still, "How vulnerable am I going to be in this situation and, being awake, am I going to see blood spurting out? Am I going to...he kept reassuring me that, yes, there would be a curtain over; I wouldn't see anything. Then, when I spoke to the anesthesia person, they said I can be as awake or asleep as I want to be. If I am uncomfortable at any time during the procedure, then they can give me more to make me more asleep. That reassured me. The couple of nights right before surgery I started getting a little nervous about it. The day I got there, they very much reassured me that it would be OK.

Factors that influence coping. Trust in health care providers and the perception of their surgery, as "routine in nature" seemed to reduce preoperative anxiety. Previous surgical experience increased or decreased anxiety depending on the quality of that experience. All cited family and hospital staff support as a key element in their effort to cope with stressors they experienced.

I wasn't worried at all. Which was good, most of the time people are freaked out about surgery but I trusted Dr. X, he seemed like an excellent competent doctor so I wasn't worried about it, plus it is a fairly usual procedure.

I am confident in the anesthesia. No concerns (Relates this to positive experience with last surgical procedure).

When I underwent my first surgery I was 14- years- old. I had never been in a hospital before, really, and that was stressful.

Also, like I said, because I knew how many people have had their tonsils taken out, it is such a routine surgery. It wasn't like I was having brain surgery.

My mom was there so I didn't really have to do anything.

On the positive side, the hospital staff was friendly and willing to answer questions that I had.

I know this procedure is not complicated or life threatening but I'm still grateful that I have religious aptitude to draw from. Also my church pastor and wife and my parents know how anxious I got so they have both volunteered to see me off to surgery.

No, I didn't have any concerns about the anesthesia because I felt reassured that they would make a decision about what I needed to have because I didn't know whether I wanted to be partially awake or fully out.

I had no worries related to the anesthesia because I had had surgery before and that had gone well.

I made sure I did everything they told. I didn't eat anything that morning. They said I could take my Maxide medication for high blood pressure. So, I felt like I did pretty good in preparing for surgery.

I was very, very lucky having a supportive husband and father and a very supportive parent network and very supportive neighbors that I could have called in an instant and no problems whatsoever.

So, to me it was like this new adventure.

The couple of days right before the surgery, I started getting a little nervous about it. The day I got there, they very much reassured me that it would be OK.

My daughter went to school and told her friends they were going to cut my thumb off and sew it back on. So, there was a lot of humor around those couple days and that made things lighter.

### Arriving

Getting there. For some, the commute to the hospital the morning of surgery was uneventful and even pleasant. For others, unexpected surgical delays increased personal anxiety and created a host of logistical challenges. Patients and their families found themselves rushed as they were now forced to travel at peak traffic hours. Spouse work schedules had to be altered to accommodate patient transportation to the hospital. For one individual, surgical delay meant not eating or drinking fluids for 17 hours.

Well the trip was fine; actually there was no traffic to speak of at 6:00 a.m. in the morning, which was nice. So that was good. I think I was actually scheduled for surgery at about 8:00 a.m. and they told us to get there at 7:00 a.m., and we actually got there a little earlier than that because like I said we anticipated some traffic and there was none.

The morning of surgery, it was frantic because I was supposed to be at the hospital at 8:00 a.m. At 6:00 a.m., I got a call saying there had been an emergency and they needed the room they had assigned me so that mine was being postponed. So, my first concern was "Oh gosh I hope he survives." Then they said, "Well, we are going to put you on hold." They didn't know how long surgery was going to take. It could take all day. So, I'm thinking, "Okay, they had a bypass or they had something that they had to do which my father had had. So, I knew it was not this small thing. So, she says, "We are on standby. Don't eat or drink." They would call me by 12:00 p.m. and let me know what was going on. At a quarter past eight I got a call and said, "Well, we are all set. Come on in." I'm thinking...my first thought was, "He didn't make it," and I thought, "Well, I know. I'm sorry but it was meant to be." In that time frame, I kept thinking, "Uh! All this preparation. I don't want to put it off. I want to do it today. I want to do it now." So my husband had taken the kids to school. He wasn't even home. They're like "Can you be at the hospital at 9:00 a.m.?" "Yes." So, he came home. We were about 15 minutes late. So the ride was frantic to get there knowing it was going to be late. I had no qualms at all about the surgery, just like, "Oh my gosh! We're late! We're late!" We went down Allentown Road, which is a mess no matter what time of day you take it. I just



wanted to say, "I'm here." That was the only qualm. That was it, had nothing to do with the surgery itself.

The drive to the hospital, uneventful. It was just chitchat with my husband, which was nice because we don't get a whole lot of time by ourselves together. I said, "I'm nervous." He said, "You'll be OK." We got there. We went to the PX first and then we went to the hospital. They told us we were going to have to wait for a long time. So, we just settled in and started waiting.

I had to make sure I didn't eat past midnight. So, I had my 11:00 p.m. snack. I'm so glad I had one at 11:00 p.m. My husband said, "You know you really don't need that because you're going to go in the morning and have it done." I'm glad I did have a little bowl of spaghetti-because I didn't get in until 4:00 p.m. I was starving.

### Day of Surgery

Waiting. Arriving at the hospital for check in and waiting for the start of surgery was a period of high anxiety for most. Some described the wait and anticipation of surgery as the most difficult part of the perioperative experience. Others viewed the whole experience as an adventure. For all, nursing personnel professionalism and efforts to keep patients informed throughout the check in process were particularly meaningful.

We got to the hospital around 6:30 a.m. and they started all the preliminary paper work and what not at 7:00 a.m. and they finished up all that at around 7:30 a.m. They had taken my blood pressure and everything and there was also the pregnancy test that had come back and everything was fine. But the gurney didn't come until 9:30 a.m. and that was hard. I understand it is no one's fault so to speak because there are a lot of different factors that come into it. They said the surgery for the person before me had taken longer than they had anticipated. Obviously, that is not something that they can control. So it's not to say I was upset or anything, but I was just frustrated because I knew that my brother had to leave soon because he had one of his finals for chemistry that day and he said, "Oh I hope I can see you off before I leave". And then he was going to come back and pick me up.

I was kind of anxious. We left in plenty of time so we could be on time. So we were there maybe a bit early. I signed in and they told me to have a seat. So, that was the longest wait that I had, waiting to actually be seen and taken care of. I think we sat in the clinic for about an hour. My husband was getting hungry so I talked him into going to get lunch himself because I knew I couldn't eat anything. So, I waited. I actually waited about-let's see, we got there at 11:30 a.m. it was an

hour and a half before they were able to get me processed in, to actually have me getting ready for surgery.

I signed in. I didn't wait it was probably less than 10 minutes to wait. As I was prepping, it was less than 15 minutes between the time they prepped me and off I went. So, it was very, very fast.

We checked in. She goes, "I'm really sorry but you're probably going to be sitting here for a while. I don't know how close you live or if you want to go home and come back." We're across the bridge. So we were concerned about that. She said, "Just hang out." There is really nothing you can do. They had a TV on in the waiting room and it only got one channel. It was nothing but soap operas, which I am not a fan of, but it seemed, like nobody else in that room was either. We read the paper, talked about kids and just waited. I was suppose to be there at 10:30 a.m. We were there at 10:30 a.m. They pulled me into a room to get changed at 3:00 p.m. and finally took me down at about quarter to four.

That was very efficient. They took my vital signs and then got me ready and took me down. I sat in the room where people were recovering from previous surgeries. They brought me down there to prep me before I went into the O.R. I was a little bit nervous because I was seeing other people who had just come out of surgery. There was a gentleman in particular, an older gentleman-who I don't think he was doing too well. He seemed to be in a lot of pain. That concerned me as a humanitarian thing.

It was interesting to me to see the whole procedure from another angle. It was very...I had anticipated more. It was really a lot of fun at that point. I don't know if fun is the word but I was having a good time experiencing something new.

Staff Professionalism. Participants cited examples of staff professionalism, caring, humor, advocacy, and competency, which made their experience better than anticipated.

Doctor X came by, he was still in his blues and he was like OK I am going to get changed now, I'll see you in a few minutes, which I thought was nice.

It was a lot better than I thought it would be. I think part of that was changed by the nurse that I first came in contact with. She was very nice and it seemed like it was more than just a job to her; it was...she cared. She was very thorough about what was going on. She made some exceptions. She bent the rules a little bit. She let my pastor back there and my mom back there so I could have a quick little

prayer. I thought that was really nice. She had a sense of humor and somewhat sarcastic. So, she was very personable. I appreciated that.

The people I ran into made it more of an OK experience because everyone was really trying to make sure I was comfortable and not too frightened. So, overall, it was an okay-I mean for surgery-it was...better than expected.

I really appreciate the staff; the way they conducted themselves; the way they treated me.

It was upbeat...I mean they explained what was going to go on. They tried to keep in upbeat spirits. They were very nice, explained everything and made sure they didn't hurt me because they were sticking needles everywhere.

Easy. It was...people were extremely nice.

Yeah. Once they did all that, got me downstairs, they got the IV in me which took no time at all. I got to tell you he did a great job. Not one bruise at all. I've had IVs before where I'm just a mess.

The gentleman that started my IV was very nice and explained everything he was doing. The anesthesiologist explained about the drugs being used.

Surgical procedure. For most, their last memory prior to surgery was in the preoperative holding area. Many welcomed amnesia, however one participant was slightly disappointed that she missed out on the adventure of the experience. For her, being a part of the whole experience would have been nice.

And then I remember there was a male and female anesthesiologist, I remember the female was a Lieutenant Colonel but I am not sure of the rank of the male. He came in and put in the IV, we chatted for a few minutes and then the Lieutenant Colonel came in and she put something in there that knocked me out. Obviously, it was a syringe, and she just put it in there through the IV and that was it. Yes, that was my last memory. It must have worked instantaneously, ah, I guess because I don't remember anything after that.

So, off in good spirits descending to the second floor. After a couple quick questions and checking my identity, the anesthesiologist hooked my IV line up, gave me a cocktail and I was out.

Other than the guy not being able to get the IV started, everything went smooth. There was a student, a medical student, who introduced himself. He tried to get the IV started and for some reason, I guess, he had a problem. Someone else came and took care of it. I remember when they rolled me out. Then, I more or less don't remember too much of what happened during the surgery.

So, I just sat there-I got the IV in me-and they gave me the medication. Didn't feel anything. I felt just fine. I was just waiting my turn and watching and finally said, "Well let's go." So it's like "Okay." As soon as I came out the door, I felt...I went "Ooh! I felt that!" Just like a little lightheadedness. I can remember going into surgery into the operating room and that's about all I remember. That was my last memory that was it, which really I wanted to be awake. I really wanted to see what was going on. I remember waking up once and Doctor X said, "You have been snoring the whole time." Like, can I watch? Can I at least see what's going on. This was the whole I really wanted the local; so I could be awake. I was so tired. Whether it was the drugs that completely put me out or both, I honestly don't know.

We got down there. I remember the surgeon came in and said hi to me. I don't remember too much past that. I woke up. The next thing I remember is they were showing me my thing in a little bottle because I asked them if I could see because I guess they were closing when I woke up a little bit. I asked if I could see it and they told me no. I'm glad now that they told me no because I really didn't want to see.

Initial recovery. Comfort measures and teaching provided by nursing personnel were an important aspect of patient recovery. One participant's observation of the staff's interaction with other patients positively influenced her own recovery. Nausea, intense hunger, comfort, and discomfort were all experienced. Most were anxious to meet discharge criteria so that they could return home.

And Lt X, she was really nice too, she kept bringing me ice. I was pretty much sitting there for two hours.

Comfortable, no problems. Except when I was putting on my clothes and standing up for a few minutes and they were telling me about, here is the medication you have to take, how many times you have to take it, this that and the other, if the pain doesn't subside then call us, there will be someone who will contact you tomorrow to make sure everything is OK, I was standing for that

entire time, all of a sudden it just hit me, I felt so incredibly nauseous and I just sat down and they gave me one of those pink pans and said just sit here a while, and hopefully it will go away, and it did. And I said all right I feel better, and they said, nope, we have to wheel you out. So they put me in a wheelchair, they took me out to the car; it was about 13:30 p.m. that we left.

I awoke 2 1/2 hours later (I think) back where I started. I vaguely remember the doctor saying the sugary went well. He gave me a choice of staying at the hospital until I felt comfortable leaving. I left as soon as possible to recoup at home.

They said, "You're all finished." Then they got me, rolled me back. They carried me back to the third floor and I was happy. I can't remember exactly what time it was, but not eating all day, I was starving. They brought me lunch, I didn't care what it was, and I was starving. After I ate and I knew, when they give you a list of things you have to do before you go home, and I knew they needed to see if I could hold the food down once I ate it. I felt good about that. They said I had to go use the bathroom before I leave. So, I told my husband I wanted to get up. The person on duty was very helpful. So I felt like oh gosh! Now I get to go home because I'm doing everything that they say I needed to do.

Felt no pain. After that, I was brought right to my room. People kept coming up and asking how I was doing, which were the nurses and the whole medical staff, they were phenomenal. They were so nice. They were so attentive.

I didn't know how drugs would react on me because everyone has different levels of tolerance and that was my concern. When was the right time to get what medication? They, again, kept saying..."Don't let it get that high, then of course you can't control it", which I never knew. I didn't want to take anything too soon. I didn't want to take the wrong thing because what if it didn't work. I do remember having my wisdom out and they gave me the Tylenol-3, which is with the codeine in it. Did absolutely nothing for me. By that point, I was in so much pain that it was beyond help. So, I really didn't want to get to that stage but finding that line was...that was something I didn't know about. Like I said, the staff was excellent and they were in their all the time just checking and asking.

I remember slowly coming to and then all of a sudden I'm OK. I'm fully awake now again. My husband was there and they were giving me food. I felt really great. I couldn't feel my arm at all.

Ride home. For one participant, driving soon after surgery was a negative experience.

That was nerve-racking because, again, I was on Percocet, which was fine, but the bumping in the car, the vibrations, started to get to me by the time I was ready to get home. I was getting very perturbed because we kept missing every green light there was or so it seemed. By that point, all I wanted to do was get home to get my foot up. I couldn't take the bouncing anymore.

Home Recovery & Transition to Activities of Daily Living. Recovery was difficult for all of the participants. For some, it was the most difficult part of the perioperative experience. Exhaustion and concern with returning to activities of daily living seemed to be a uniform concern among all participants. Several found medications side effects bothersome. In one case, pain medication had not been prescribed upon discharge. Some participants relied on over-the-counter medication and creative home comfort measures to obtain relief. All described the importance of family support in their recovery. The importance of clear home instructions, follow-on calls, and a reliable contact number is emphasized here. For some, return to work presented obstacles not anticipated.

The Tylenol was not helping so we ended up having to call here over that weekend I think on Sunday, and they prescribed Percocet, and I took that for a couple of days and that helped out. That was fine.

Um, it wasn't until just recently, I think Saturday that I was able to start eating right, normal foods like eggs and chicken. Before that everything was too hard. Obviously my family was a little worried, they were like, you are not eating anything substantial, all you are eating is drinking apple sauce and drinking water and that's not healthy and I was like, I can't eat anything else.

Yes, they were very kind, I have to admit, and my aunt the loving woman that she is made some vegetable pasta and made sure that the vegetables were really cooked.

So that's the only thing I'm a little concerned about, not being able to keep up with physical activity back at school but I am sure they will be understanding and give me some time.

The medication. The pain. The fogginess. Not being able to breathe out of your nose. Having difficulty sleeping. I feel like I'm up-like I'm not getting my REM sleep or my deep sleep. So, that really stinks. When I do sleep, I have difficulty breathing through my mouth. My tongue dries out. So, I wake up and I'm dry and I have to drink and then I have to pee and then it just keeps going all over again. Yes. This is probably the worst part of it.

I tried stopping my pain medication yesterday, which didn't work out too well because of the pain. It was still pretty good.

My husband was here. They took care of everything and I was lazy all weekend. It was wonderful. I felt like a queen.

Oh yeah, I forgot about that. Actually, I guess I misunderstood how you take your medication when they say take it with food. I had percocet, which is strong, and I started taking the two tablets. What I did wrong was take the medication before I ate then ate. So, I did get sick on three occasions every time I ate, maybe about 15 minutes afterwards. So we did call the doctor back to find out what to do. The doctor did prescribe another medication that I could take – Tylenol 3. Then later with the follow-up call with the nurse that was the one that told me how to take the medication.

As far as pain is concerned, there's no problem. Not even the foot hurts. It's all the other muscles that are killing me. My foot is fine. It's when you're using something you've never used before (referring to crutches). It's all the other muscles that aren't used to it.

We get the newspaper every morning. Then I put on the plastic bag the newspaper comes in. Then I tape it up with this tape and it seems to be working.

I just completely stayed off my feet. It started to get to me by Thursday. I tried to get up and it was exhausting. Then, once I asked the doctor and he said I looked fine, no problems, and go back to work. I did go back to work today and I'm totally exhausted.

I work at the Kennedy Center. So it's not like I can park right there and come right in. Getting to my office is a quarter of a mile away. That wasn't so bad. It was getting up and getting down. Not being able to carry anything. You realize how helpless you really are. Actually, today was my first day back, I'm tired.

Well, I've probably been doing a lot more than I should have only because I have two young children and my husband had to back to work.

My husband brought me some Percocet, and I took that. I woke up Saturday morning and I was "Ugh". It was horrible. All I had was a number for the orthopedic clinic but the hospital APU unit did call Saturday morning and speak to my husband. They said cut two tablets down to one. That was it. They called the one time. I think we should have had a number though to call back because Saturday night, I was like I don't really want to take this anymore. I just want to take extra-strength Tylenol, but it didn't take away enough pain.

Best Part of the Perioperative Experience. The best part of the perioperative experience for most was the exceptional caring, professionalism, and outreach demonstrated by nurses and physicians who provided their care.

I think it was wonderful how Doctor X recognized that I only had a very short amount of time and that I really needed to get this done and that he was so willing to take time out of his schedule because I know that he was very busy during that time, I think just the interaction with him and that he was so understanding, that was really it.

I really appreciate the nurse allowing my pastor and my mom coming back there for a prayer before surgery. So I'd have to say that, since that was a starting point that really started it off right.

The best part was when it was over. After I ate and I knew, when they give you a list of things you have to do before you go home, and I knew that they needed to see if I could hold the food down once I ate it. I felt good about that. The staff was great. I had no bad experience the entire time I was there. Everyone was nice. They were very understanding. I had a roommate who was a little bit more sassy, but was scared. The fact that these staff members were able to understand that and to react positively instead of negative to her, which I thought was very, very sweet. I know it's a professional way to do it. Still, when you are in that situation, it's very hard to act that way when someone is screaming at you and not trying to help you but attacking you. It takes a lot out of someone, it really does. I was impressed with that and I truly enjoyed my stay.

The bedside manner of my surgeon I think. He was really good. Beforehand, he came to speak to me. I remember him coming to say hi in the O.R. while I was awake. Then he came out afterwards to the room when I was in there with my husband. He came and spoke to me two times before I left the hospital. Then he called my house that night just to make sure everything was OK. So, I think he was really good about that. You don't get that a lot. You don't feel like they really care about you as a person. I think he did.



Worst Part of the Preoperative Experience. The question, “what was the worst part of your surgical experience?” generated a variety of responses.

Everyone kept saying, you are not going to be able to eat, its going to hurt really bad. They weren’t trying to be rude or to frustrate me, they were just trying to be honest.

What I am experiencing now. The medication. The pain. The fogginess. Not being able to breath out of my nose. Having difficulty sleeping. I feel like I’m up like I’m not getting enough REM sleep or my deep sleep, I have a little bit of difficulty breathing through my mouth. My tongue dries out. So, I wake up and I’m dry and I have to drink and then I have to pee and then it just keeps going all over again. Yes. This is probably the worst part of it.

The worst part was probably waiting because “Oh man”. It is going to happen?” Yeah, the waiting in the lounge. Waiting for surgery to get started.

I kept worrying about the pain level and when I needed what medication and what that medication would...whether it would effect me or not. They did give me Percocet. They explained that some people have a very adverse reaction to it and I could be hallucinating and I was like “great”. I would prefer not to do that at this point but it happens. So, that was my only major concern or the negative was just knowing when that time frame was.

Waking up Saturday morning he had given me Percocet to take. I was nauseated and felt hungover, I didn’t hurt but felt horrible. That was the worst part.

Recommendation for Others About to Undergo Anesthesia or Surgery. Participants were anxious to share their experience to reduce stress for those who anticipate anesthesia or surgery in the future.

I would certainly say go ahead with it. Anything has got to be better than the way it was, at least in my case not breathing at night. Let’s take a chance. The only problem would be the recovery time. If they only took a week off I would suggest taking two weeks.

The person has to be prepared for waiting; have something they can do during that period. It was an unpredicted, unscheduled wait. Other than that the hospital does a good job with preparing people, I think.

Just go in with a positive attitude. That's half the battle right there. If you're going in scared to death, there's probably not a whole lot you can do to change that. It really isn't a bad thing. If you are going to get something corrected, yes, it's going to be uncomfortable and you are going to be put out a little bit but, you know, that's life. You can be in a car accident tomorrow when you have to go in anyway, what's the difference? I had such a positive experience. Every person is different. As long as they have information and their questions are answered, maybe that might alleviate a little bit of fear.

Get as much information about the actual procedure that you're going to have done and what the side effects of the medicine are going to be that they're going to give you beforehand. Be informed. I think that's the biggest thing being informed, because I feel personally that if I'm informed and I know more about it, then I'm more comfortable than with the fear of the unknown.

## CHAPTER V: SUMMARY

### Introduction

This chapter presents a discussion of the research findings. Integration of the findings across the theme categories and theme clusters are examined and current literature is reviewed. The significance for nursing, recommendations for further study, and research conclusions are also discussed.

### Integration of Findings

The purpose of this study was to describe the perioperative experience of the ambulatory surgery patient.

A phenomenological approach was used to provide a description and thematic interpretation of the meaning of the experience. Five ambulatory surgery patients were interviewed. Audiotapes of the interviews were transcribed using procedures adapted from Colaizzi (1978) and van Manen (1990). The fundamental structure of the experience had seven themes: preparing, arriving, day of surgery, home recovery, best part of the perioperative experience, worst part of the perioperative experience, and recommendations. Themes emerged from 11 interpretive clusters. Lifeworld existentials of lived space, lived time, lived body and lived relationship as described by van Manen were used as guides for reflection and development of a comprehensive description of the experience.

### Comprehensive Description of the Experience

This phenomenological study explored the structure of the lived world as experienced by the ambulatory surgery patient. The perioperative experience of one

patient differed from that of another patient or members of the healthcare team. At the most general level, the most universal themes of the lived world are the existential themes of lived space, lived body, lived relationships and lived time.

### The Existential Themes

This comprehensive description of the perioperative experience of ambulatory patients takes its shape from four essential themes. These are helpful as guides for reflection in the research process: (a) lived space (spatiality), (b) lived body (corporeality), (c) lived time (temporality) and (d) lived human relation (communality).

1. Lived space or spatiality is felt rather than measured. The space in which patients found themselves affected the way they felt about the surgical experience.

2. Lived body or corporeality refers to physical or bodily presence in the world. It was the felt response of patients to personal factors, which included fear, fatigue, pain, and relief.

3. Lived time or temporality was each patient's experience of time. Qualities of time were referred to in descriptions of duration, acceleration, deceleration, frequency, recollections, and visions of the futures.

4. Lived relationship or communality alludes to relationships maintained with others. Patients' connection with family and members of the healthcare team allowed a sense of comfort and security.

### Lived Space

Although we do not consciously reflect on space, it affects the way we feel and influences that which we experience. Other aspects of lived space included environmental factors such as distance, hospital, and home configuration.

The spaces occupied by patients shaped their experience in many ways. They all arrived at the hospital to find spaces that were unfamiliar in structure and appearance. Sounds and sights rendered a sense of being lost, strangeness, vulnerability, and possible excitement or stimulation.

The only problem is when you do not know the hospital. You really do not have a clue where you are going and how you're getting there. As long as you don't have any qualms asking someone, people are always willing to help you out.

Because of the construction, clinics have been moved around. This makes it confusing for the patients as well as medical staff. This is a large building and as with any place if you don't use it everyday, you get lost.

I had to go to five different places, I think it was. It was a pretty long day. Yes, I went from one end of the hospital to another. So, it wasn't close together.

Age alters the perception of space. Children probably experience space in a different modality than adults. For one thing, adults have learned the social character of space, conventional space (van Manen, 1990). One participant described how it felt to enter a hospital for the first time at age 14.

When I underwent my first surgery I was 14 years old, I had never been in a hospital before, really, and that was very stressful. You know most people by the time they are age 14 have broken an arm or leg, or something, and they have been in the hospital, they have had a cast or something. But I hadn't had any type of injuries or any type of surgery prior to that.

Lived distance, the road for example, is an aspect of lived space. Those commuting from distant locations in heavy traffic conditions experienced more stress the morning of surgery.

So, the ride in was frantic to get there knowing it was going late. I had no qualms at all about the surgery, just like, "Oh my gosh! We're late! We're late! We're late! Yeah, there was traffic. We went down Allentown Road, which is a mess no matter what time of day you take it. I just wanted to say, "I'm here." That was the only qualm. That was it. It had nothing to do with the surgery itself.

Most patients seemed anxious to meet discharge criteria so that they could retreat to their home environment. The home provided a very special space experience, a secure inner sanctum where they could feel protected and by themselves. At home they could reestablish some control of the environment around them. They could turn the room temperature up or down and adjust the noise level. At home they could eat *what* they desired *when* they desired. They bathed at their leisure. Home was a place where they could *be* themselves!

I vaguely remember the Doctor saying the surgery went well. He gave me a choice of staying at the hospital until I felt comfortable leaving. I left as soon as possible to recoup at home.

I knew the requirement to get out of the hospital was to prove myself in the water closet. Then I could leave the hospital.

Yeah. I can briefly remember hearing the doctor say that everything went pretty well and that I could leave....or he gave me the option of staying and recovering as long as I would like or I could go home and leave as soon as I was able to use the facilities. Obviously, I'd rather go home.

One participant was in no rush to return to her home space. For her, the hospital environment could best provide the rest and pain management she needed for recovery.

Although my family was wonderful, it still was not as smooth as being in the hospital. My house is not set up for this kind of care. I stayed on Percocet for

five days which I think is a must for someone like me. The minute my foot started to feel better, I thought I could do more. This turned out not to be true.

Participants found themselves sharing space with others in waiting rooms, holding areas, and recovery units. Some sought comfort in the close presence of others, one found the experience anxiety provoking. One participant's observation of the staff's interaction with another patient positively influenced her own experience. The spaces occupied by each helped to shape their experience.

I sat in the room where people were recovering from previous surgeries. They brought me down there to prep me before I went into the operating room. I was a little bit nervous because I was seeing other people who had just come out of surgery. There was a gentleman in particular-an older gentleman-who I don't think was doing too well. He seemed to be in a lot of pain. That made me a little bit nervous. I didn't know what he had done but I just know that they were doing a morphine pump on him and he was complaining that he was in a lot of pain. That concerned me as a humanitarian thing. Like, "Okay". Now it is my turn to go in there.

The staff was great. I had no bad experience the entire time I was there. Everyone was nice. They were very understanding. I had a roommate who was a little bit more sassy but she was scared. The fact that these staff members were able to understand that and to react positively instead of negative to her, which I thought, was very, very sweet. I know it's a professional way to do it. Still, when you are in that situation, it's very hard to act that way when someone is screaming at you and not trying to help you but attacking you. It takes a lot out of someone. It really does. I was really impressed with that and I truly enjoyed my stay.

### Lived Time

Time and waiting are themes that reoccurred throughout each description. Lived time began with hospital processing. For participants, "faster" translated to "better". Time seemed accelerated as most moved quickly through admissions, lab, radiology, and anesthesia. For one participant, boredom and anxiety slowed the passage of time.

That day (referring to hospital processing) was great, we were in and out of everything, it was wonderful.

Everything went quickly. I got in and out of each place I needed to stop at.

After that we came to anesthesiology, signed out name in, we got called right away, so that was wonderful and then after that I dropped paper work off to pre admit, I went to lab, they took my blood and I was in and out of here in about an hour.

Participants who were told to anticipate a “long day” felt prepared to manage waiting.

My doctor had said, “Just assume you will be here all day because you just don’t know how long it takes to go to every single office to be seen.” So, he said, “Expect to be here until 4:30. If you get out early, it’s a bonus. Then if not, don’t be upset.” So, that was probably the best thing he could have done so then I knew I was there until at least 4:30. Then when I got out early, it was great. So, I went through just like that.

Arriving at the hospital for check in and waiting for the start of surgery was a period of high anxiety for most. Waiting slowed the passage of time and intensified personal anxiety. The presence of family and updates provided by nursing personnel hastened the passage of time and made waiting tolerable.

Yes, waiting was difficult because I just wanted to go and get it done. And I understand it is no ones fault so to speak because there are a lot of different factors that come into it. They said that the surgery for the person before me had taken longer then they had anticipated. And obviously that is not something they can control.

The gurney didn’t come until 0930, that was hard.

The worst part of the whole surgical experience was probably the waiting because, “Oh man. Is it going to happen?” Yeah, the waiting in the lounge. Waiting for the surgery to get started.

The time that had elapsed since the last meal made the first meal after surgery a memorable and cherished event.



I can't remember exactly what time it was but, not eating all day, I was starving. They brought me lunch. I didn't care what kind of sandwich it was. It tasted good!

Finally, of greatest significance, was the time taken by others to teach, encourage, listen, and reassure. Outreach by family and staff established trust and communicated caring. The physician worked one participant into a full surgical schedule so that she could return to school. The nurse anesthetist assured a frightened patient that he would get the amnesia and pain relief that he needed. The ambulatory surgery nurse "bent the rules" so that a patient could be with his pastor and family until the start of surgery. Nursing personnel initiated postoperative phone calls to make sure patients understood. Family members devoted hours to the care and recovery of loved ones. Time-shared by others influenced participants' perception of the experience. It communicated "you are important;" it communicated "you are not alone in this process".

My surgeon did come in and speak to me while were waiting and made me feel at ease. "We're sorry for this. Sorry you have to wait". I wasn't that nervous at all.

It does make a big difference because a lot of people are just like, ah we don't have time right now, we are really booked we will have to fit you in another time.

The bedside manner of my surgeon, I think. He was rally good. Beforehand, he came in to speak to me. I remember him coming to say hi in the operating room while I was awake. Then he came out afterwards in the room when I was in there with my husband. He came and spoke to me two times before I left the hospital. Then he called at my house that night to make sure everything thing was OK. So, he was really good about that. You don't get that a lot. You don't feel like they really care about you as a person. I think he did.

Then, when I spoke to the anesthesia person, they said I could be as awake or as asleep as I want to be. If I am uncomfortable at any time during the procedure, then they can give me more to make me asleep. That reassured me. The couple days right before surgery, I started getting a little nervous about it. The day I got there, they very much reassured me that it would be OK.

They again kept coming again and again to see how things were and they would ask me to rate my pain. My pain never got over six and honestly, the six wasn't unbearable. They kept saying, "Don't let it get that high," because once it did then, of course, you can't control it, which I never knew.

Then, later on, the follow-up call with the nurse that was the one that told me how to take the medications.

My husband had taken care of that. He took also the day after surgery he took off. He prepared all the meals. Then, when he went to work, he set up frozen meals or whatever. He fixed something that I could just heat up.

The induction of anesthesia seemed to halt the passage time, at least for a moment.

My last memory before surgery was just getting my cocktail mix. Just hooking me up to the...after he stuck my IV in there and put it in there, that was it.

So, I just remember lying there waiting. I remember when they rolled me out. Then, I more or less don't remember too much of what happened after surgery. Yeah, I think I remember seeing the doctor. Then, the next thing I remembered was when it was over and they took down...they had something in between.

Once they came back, the relaxer was started and I was wheeled into the operating room. I don't remember a whole lot. I think I slept most of the time. I can remember going into surgery-into the operating room and that's about all.

### Lived Relationship

Relationships with staff and family had a tremendous impact on the overall quality of the surgical and recovery experience. Relationships of trust established with healthcare providers alleviated fear and concern.

I trusted Doctor X, he seemed like an excellent competent Doctor so I wasn't worried about it (referring to surgery).

After that, I was brought right to my room which the nurses and the whole...medic staff, they were phenomenal. They were so nice. They were so attentive.

No. I'd do it again. The hard part is this; not being able to deal with this foot but that was my choice. I thought it was great. I can not praise the staff enough.

The staff could not have been nicer or more professional. It was a pleasure to stay in this hospital. You always hear negatives but not enough positives. The staff members should be proud of the work they do.

The part of my surgical experience that stands out the most starts with the first person I came into contact with, my nurse. She was very thorough in explaining what needs to be done. But, above all that, I felt I was more than just another “customer”. Also, the nurse bent the rules by allowing my pastor, my mom, and my wife assemble for a quick prayer and kisses.

From there, that day, I think that the people I ran into made it more of an OK experience because everyone was really trying to make sure I was comfortable and not too frightened. So, overall, it was an OK – I mean for surgery- it was....it was better than expected.

It was an upbeat...I mean, down there, they explained everything and tried to make sure they didn't hurt me because they were sticking needles everywhere. So, I really appreciated that too. Everyone...like I said, it was a positive...as positive as can be experienced.

The care and support received from family members allowed each to overcome challenges each post-operative day presented.

My husband was very, very supportive and he's pretty much one of the...he's probably equal with caring. So, my situation was probably easier than a lot of others. My parents are right in the neighborhood. So, they're there also. So, I don't really worry about that.

The first day, my husband helped me into the bathtub because I figured I wanted to get into the bathtub. After the first day that he helped me, then I realized “maybe I can do this myself”. So, I was able to figure out a way to lower myself into the bathtub keeping the foot out. So, that has been my adventure everyday is taking a bath. Then I am able to wash and try to push myself back again. I've been doing that.

He had already picked up the medications I needed. So, my husband helped me get in the house and come up the stairs and then he helped me get into bed and I just waited. He prepared meals for me so that I could take my medication.

### Lived Body

Surgery altered physical self; fatigue and discomfort characterized recovery.

Participants sought relief through the use of medications and creative home comfort measures.

Then I went to Motrin which I've been taking, which I've had for my knees and other stuff before but again, I may take one at night and that's it...only after I'm completely exhausted and it hurts. Not even the foot hurts. It's all the other muscles that are killing me. My foot is fine. It's when you're using something you have never used before. It's all the other muscles that aren't used to it.

I tried to clear my head up so I could...I felt like I was constantly drunk and a little bit dizzy.

The medication. The pain. The fogginess. Not being able to breath out of your nose.

Changes in sleep patterns were understandably mood altering.

Having difficulty sleeping. I feel like I'm up-like I'm not getting my REM sleep or my deep sleep. So, that really stinks. When I do sleep, I have a little bit of difficulty breathing. Yes. This is probably the worst of it.

All found physical day-to-day tasks challenging, and relied on family for aspects of their care. Alterations in physical self created temporary changes in self-image. Those who identified with being caregivers themselves found they could no longer "do for others." For some this may have been difficult; others welcomed the opportunity to be cared for.

My husband was here. They took care of everything and I was lazy all weekend. It was wonderful. I felt like a queen. My daughter made me breakfast Sunday morning and brought it. Then Tuesday, my husband went back to work and I had to take my daughter back to school. That was like "Oh man! I really have to get back into it. I have to be able to take a shower by myself and get them ready." It was a little difficult the first day but I'm...now it's Friday, I've got my routine down again. It takes me longer than it normally would, obviously, if I had both of my hands available.

Participants found it challenging to balance their needs for rest and recovery with family obligations.

Well I have probably been doing a lot more than I should have only because I have two young children and my husband had to go back to work.

Yes. It's hard to tie children's shoes. That's the hardest thing I have been finding. I can do a lot of things one handed or I used these two fingers and this hand and I can do most things but tying shoes.

### Implications of the Findings

#### Significance to Nursing

The significance of this study is based on its contribution to nursing knowledge by advancing the understanding of ambulatory surgery patients' perioperative experiences. There are few studies, which examine the perioperative experience from the "patient point of view." Some studies have examined isolated aspects of the perioperative experience (i.e., the effects of preoperative teaching), but none have sought a comprehensive understanding of factors which influence the overall experience. In addition, this study seeks direct input from participants without the use of surveys, which can reflect biases of those who develop them. Finally, this study targets the ambulatory surgery experience, which is significant because of the shift in patient care to the ambulatory care setting.

Healthcare professionals have an opportunity to help allay the natural fears most patients experience, and this can best be done by first understanding the patients' perspective. Quality of care decisions, patient satisfaction, and clinical outcomes can be improved by understanding the patient view. Patients' personal descriptions of their

perioperative experience will contribute to an overall understanding of the perioperative experience.

This study will also begin to meet some challenges posed by Triservice Nursing Research Program Advisory Council, who have identified health care delivery systems and ambulatory surgery as high priority research areas.

### Discussion of the Findings

#### Anticipation

Anticipation was an emotion experienced by all. Participants all viewed surgery as a means to rid themselves of illness and return to a lifestyle free from pain. It was this expectation that allowed each to overcome the challenges inherent to surgery and its recovery.

Patients enter the healthcare system with a variety of expectations. Healthcare providers must continue to provide clear and accurate information to consumers so that they can approach the surgical experience with realistic expectations of care and recovery.

#### Special Preparations

All participants experienced a sense of urgency as they rushed to complete personal arrangements necessary before surgery. Each arrived the hospital with varying degrees of fatigue. Several began the surgery process “tired”; without the reserve needed to fully cope with the stresses inherent to surgery. Inadequate rest before surgery contributed to the exhaustion experienced during the recovery period.

Descriptions provided by participants may prompt others to minimize preoperative exhaustion by starting preparations early, prioritizing, delegating, or leaving non-essential tasks unfinished.

### Processing

Most were surprised and pleased by the ease and efficiency of hospital processing. Areas that processed participants “quickly” were perceived as “efficient”. One participant found the process repetitious as he provided the same information over and over to several clinics and repeated similar steps multiple times.

Hospital management should critically examine their areas on an on-going basis to minimize repetition and maximize efficiency. Soliciting feed back from customers is helpful to understanding the issues they experience. Participant feedback can be used to identify areas for improvement or validate the effectiveness of existing processes.

### Anxieties and Concerns

Concerns included pain management, drug side effects, intraoperative awareness, hospital procedures, recovery, loss of privacy, loss of control, fear of making a mistake, preoperative household preparations, and not being able to eat or drink for the time preceding surgery. Patient concerns varied greatly which supports findings by White (1997) who concluded that each person who undergoes surgery has unique concerns.

### Factors that Influenced Coping

Trust in health care providers and adequate preoperative preparation seemed to reduce anxiety. Previous surgical experience increased or decreased anxiety depending on

the quality of the experience. All cited family and hospital staff support as a key element in their efforts to cope with anxiety.

One patient described how her preoperative visit with the nurse anesthetist reduced her preoperative anxiety. This supports findings by Leigh et al. (1977) who reported that patients who received preoperative reassurance about anesthesia from a member of the hospital staff were less anxious than those in a control group that were given no support. The preoperative visit can relieve uncertainties and gives the patient an opportunity to discuss fears and be reassured. The importance of a preoperative visit by an anesthesia provider is emphasized here.

Two participants commented on the use of statistics by a provider in describing the risks associated with anesthesia. Health care personnel have an obligation to obtain informed consent. Quoting statistics is often used to describe the risks associated with surgery and anesthesia. Providers should critically examine their personal approach in discussing sensitive issues. These findings support the views of Madej and Paasuke (1987) who also emphasized that the effectiveness of the preoperative interview depends on the content, format, timing, personality of the interviewer, and personality and circumstances of the patient.

One participant related her preoperative anxiety to memories of her last surgical experience, which she viewed as negative. The positive surgical experience she encountered this time has enabled her to cope with the idea of her next surgical procedure. "I think that the first surgery will be way in our past."



Hospital personnel who are sensitive and responsive to the individual needs and concerns of surgical patients create an environment that minimizes fear and facilitates coping.

#### Staff Professionalism

Examples of staff professionalism, caring, humor, advocacy, and competency were cited by all throughout the perioperative experience.

The importance of outreach by hospital personnel can not be over emphasized. Healthcare providers should continue to incorporate these values into their daily practice.

#### Day of Surgery

The majority experienced surgical delays, which increased personal anxiety and created a host of logistical challenges. Patients and their families found themselves rushed as they were now forced to travel at peak traffic hours. Spouse work schedules had to be altered to accommodate patient transportation to the hospital. For one individual, the delay meant not eating or drinking for 17 hours.

In a hospital environment there are very often valid reasons for surgical delays. Regardless, hospitals must look critically at the reasons for excessive and frequent delays. One participant had a surgery show time of 10:30 a.m. yet didn't get into surgery until 4:00 p.m. Administration must be mindful of the impact surgical delays have on patients and their families. They should determine if delays are a symptom of hospital processes that need re-evaluation.

Policies and procedures regarding NPO status may need to be re-visited. At the medical treatment facility where this research was collected, patients were asked not to

eat or drink within six hours of surgery. Other hospitals in the United States have changed their NPO status policy to reflect updates in the literature. At some facilities, patients may have clear liquid with in two hours of surgery (American Society of Anesthesiologists Task Force on Preoperative Fasting, 2000).

### Surgical Procedure and Anesthesia

Many welcomed amnesia however one participant was disappointed that she missed the adventure of the experience. For her, being a part of the whole experience would have been her preference. Her description supports the views of White (1997) whom wrote "It is important to consider that many patients may not wish to have prolonged amnesia". Some may prefer to have recall of events before and after surgery. Finally, sedation may actually increase anxiety. Anesthesia providers should tailor the anesthetic plan to meet the individual needs of the patient.

### Recovery

Teaching provided by health care personnel was an important aspect of patient recovery. Written home instructions were particularly helpful to participants in reinforcing aspects of care that could not be fully absorbed at the time of discharge, because of the effects of exhaustion and medications on memory. Follow up telephone calls were critical and should be continued. Hospital personnel must ensure patients have a reliable hospital telephone number. Contact with health care personnel during the recovery period allows for clarification of a variety to issues related to postoperative care and medication administration

### Strengths

This study was strengthened by the detailed descriptions provided by each participant. All gave an honest description of events that helped to shape their experience. Participants were enthusiastic in their efforts to share their experience with others. Many of them came prepared with notes and journals, which they had reviewed in preparation for the interview. At the conclusion of the interviews they offered to provide further information or clarification should questions arise later. Participants all expressed an interest in how the information would be used; each hoped the information would be helpful to other surgical patients and healthcare providers. Participants were proud that their descriptions would contribute to the understanding of the perioperative experience and the overall body of nursing knowledge.

### Recommendations for Further Research

This study describes the perioperative experience of healthy surgical patients who are members of the military community and received care at a medical treatment facility. This investigation should be expanded to include participants from a variety of populations. Additional studies might target the high acuity patient or those receiving care in the civilian healthcare system. It would also be beneficial to examine the surgical experience as perceived by those who have limited home support systems.

Research still needs to be conducted to measure the effectiveness of care in the ambulatory care setting. Descriptions provided by participants can be used to improve the quality of care, reduce health costs, and limit malpractice liability.

Healthcare personnel have an opportunity to help allay the fears most patient's experience. Those who put aside personal assumptions are better able to respond to the individual needs and concerns of each patient.

## REFERENCES

- Alpert, C. C., & Thomas, J.D. (1985). General anesthesia. Clinical Plastic Surgery, 12, 33-42.
- American Society of Anesthesiologists Task Force on Preoperative Fasting. (2000). Practice Guidelines for Preoperative Fasting and the use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration: Application to Healthy Patients Undergoing Elective Procedures. Anesthesiology, 90, 896-905.
- Benoliel, J. Q. (1984). Qualitative approaches. Western Journal of Nursing Research 6, 1-8.
- Benner, J. S. (1994). Interpretive phenomenology: Embodiment, caring, and ethics in health and illness. Thousand Oaks, CA: Sage.
- Burns, L. A. (1984). Ambulatory surgery. Rockville, Maryland: Aspen Systems
- Burns, N. & Grove, S. (1997). The practice of nursing research: Conduct, critique, and utilization. (3<sup>rd</sup> ed). Philadelphia: W.B. Saunders.
- Chung, F. (1993). Are discharge criteria changing? Journal of Clinical Anesthesia, 5, 645-685.
- Colaizzi, P. (1978). Psychological research as the phenomenologists views it. In Valle and King (Eds.). Existential phenomenological alternatives for psychology. New York: Oxford University Press.
- Denzin, N. K., Lincoln, Y. S. (1994). Handbook of qualitative research. Thousand Oaks, California: SAGE Publications, Inc.

Domar, A. D., Everett, L. L., & Keller, M. G. (1989). Preoperative anxiety: Is it a predictable entity? Anesthesia and Analgesia, 69, 763-767.

Domar, A. D., Noe, J. M., & Benson, H. (1987). The preoperative use of the relaxation response with ambulatory surgery patients. Journal of Human Stress, 13, 101-107.

Egbert, L. D., Battit, G. E., Turndorf, H., & Beecher, H. K. (1963). The value of the preoperative visit by an anesthetist. The Journal of the American Medical Association, 185 (7), 553-555.

Flaherty, G. G., & Fitzpatrick, J. J. (1978). Relaxation techniques to increase comfort levels of postoperative patients: a preliminary study. Nursing Research, 26 (6), 352-355.

Fung, D., & Cohen, M.M. (1998). Measuring patient satisfaction with anesthesia care: A review of current methodology. Anesthesia and Analgesia, 87, 1089-1098.

Johnson, M. (1980). Anxiety in surgical patients. Psychological Medicine 10, 145-152.

Lancaster, K. (1997). Patient teaching in ambulatory surgery. Ambulatory Surgery, 32 (2), 417-426.

Leigh, J. M., Walker, J., & Janaganathan, P. (1977). Effect of preoperative anesthesia visit on anxiety. British Journal of Medicine, 2, 987-989.

Madej, T. H., & Paasuke, R. T., (1987). Anesthesia premedication: aims, assessment and methods. Canadian Journal of Anesthesia, 34, 259-267.

Munhall, P. L. (1994). Revisioning phenomenology: Nursing and health science research. New York: National League for Nursing Press.

Nagelhout, J. J., & Zaglaniczny, K. L. (1997). Nurse Anesthesia. Philadelphia: W. B. Saunders Company.

O'Hara, M. W., Ghoneim, M., Hinrichs, J., Mahesh, P., Mehta, M., & Wright, E. (1989). Psychological consequences of surgery. Psychosomatic Medicine, 51, 356-369.

Polit, D. F., & Hungler, P. H. (1992). Nursing research. (3rd ed.), Philadelphia: J. B. Lippincott Company.

Powers, A. P., & Knapp, T. R. (1995). A dictionary of nursing theory and research. Thousand Oaks, California: Sage

Sandelowski M. (1986). The problem of rigor in qualitative research. Advances in Nursing Science, 8, 27-37.

Shafer, A., Fish, P. M., Gregg, K. M., Seavello, J., & Kosek, P. (1996). Preoperative anxiety and fear: A comparison of assessments by patients and anesthesia and surgery residents. Anesthesia Analgesia, 83, 1285-1291.

Turner, D. M. (1998). The experiences of chief nurses in military operations other war. Unpublished doctoral dissertation, University of Minnesota.

van Manen, M. (1990). Researching Lived Experience: Human science for an active sensitive pedagogy. New York, State University of New York Press.

White, P. F. (1997). Ambulatory anesthesia and surgery: Past, present and future. In P. F. White (Ed.). Ambulatory anesthesia & surgery (pp. 1-34). Philadelphia, PA: W. B. Saunders.

Williams, J. G. L., Jones, J. R., & Williams, B., (1975). The chemical control of preoperative anxiety. Psychophysiology, 12. 47-49.

Wolcott, W. W. (1988). Ambulatory surgery and the basics of emergency surgical care. (2nd ed.). Philadelphia: J. B. Lippincott Company.



Appendix A: USUHS IRB Approval

**UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES**  
**4301 JONES BRIDGE ROAD**  
**BETHESDA, MARYLAND 20814-4799**  
**Notice of Project Approval**  
**Original**

**Protocol Information:**

Project Number: **T061AW-01** Sponsor ID: T061AW  
Principal Investigator: **Diane Layman**  
Department: GSN - Graduate School of Nursing  
Sponsor: Uniformed Services University of the Health Sciences  
Project Type: USUHS - Graduate Nursing Students  
Title: **The Perioperative Experience of the Ambulatory Surgery Patient**  
Project Period: 10/01/1999 - 09/30/2001  
Budget Period: 10/01/1999 - 09/30/2001

**Assurance and Progress Report Information:**

<u>Name</u>	<u>Approval Type</u>	<u>Status</u>	<u>Approval Date</u>	<u>Due Date</u>	<u>Forms Rcvd</u>
IRB	TBD - To Be Determined	P - Pending approval			10/01/1999
Progress R	Fi - Final			12/31/2001	

**Remarks:**

**This Notice of Project Approval establishes that the Office of Research has reviewed and approved the project period from October 1, 1999 through September 30, 2001. Funding will be provided through the Graduate School of Nursing.**

I have reviewed the project described below and approve the research for this project. However, this action does not imply that the appropriate assurances have been obtained nor should work begin on this project until all appropriate assurances are obtained. No funding is provided for this budget period.

Questions regarding this award should be directed to Mary Kay Gibbons at 301-295-9817 in the Office of Research.

  
Ruth Ellen Bulger  
Vice-President for Research

cc: Faye G. Abdellah, RADM (RET)  
Lynn Miller  
File

Appendix B: MGMC IRB Approval



**DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 89TH AIRLIFT WING (AMC)**

10 Dec 99

**MEMORANDUM FOR MAJOR LAYMAN**

**FROM: 89 MDG/SGH**  
1050 West Perimeter Road  
Andrews AFB MD 20762-6600

**SUBJECT: Proposed Clinical Investigation Research Protocol – Minimal risk**

1. Your protocol entitled "The Perioperative Experience of the Ambulatory Surgery Patient" was reviewed and unanimously approved by the 89th Medical Group Investigational Review Board (IRB) on Nov 10, 1999.
2. Your research study has been assigned the number FMG1999018H. You may begin the study upon receipt of this letter. Please remember that any subject's personal identification needs to be coded during the data collection in order to protect their privacy and any indirect linkage must be destroyed after data collection is complete.
3. All adverse reactions must be reported to the IRB.
4. This approval is only for the study to be conducted at MGMC. If this study is to be conducted at other sites, this would require a separate approval by the IRB at that site.
5. Please direct all question to TSgt Thule Huff, Reserve Affairs Liaison; 89 MDG/SGATR; 1050 West Perimeter Road, Andrews AFB MD 20762-6600 or Fax 240-857-4093 or e-mail [huffth@mgmc.af.mil](mailto:huffth@mgmc.af.mil) or Lt Col Janice M. Rusnak (IRB Chairperson) at 240-857-8831.
6. We wish you the best in your rescarch efforts. Thank you for your cooperation with the above IRB regulations and for participation in research at the 89th Medical Group.

**RUTH A. ROBINSON, Col, USAF, MC**  
Chief of the Medical Staff, 89th Medical Group